

PATENT

ÍTED STATES PATENT AND TRADEMARK OFFICE

Application No.:

10/539,437

Filing Date:

March 20, 2006

Applicant:

Walter GUMBRECHT et al.

Group Art Unit:

1635

Examiner:

Unassigned

Title:

METHOD AND DEVICE FOR PCR-AMPLIFICATION

AND DETECTION OF NUCLEOTIDE SEQUENCES

Attorney Docket:

32860-000900/US

Customer Service Window Randolph Building 401 Dulany Street Alexandria, VA 22314 Mail Stop Amendment January 25, 2007

INFORMATION DISCLOSURE STATEMENT

Sir:

Pursuant to 37 C.F.R. §§ 1.56, 1.97 and 1.98, Applicant hereby submits an Information Disclosure Statement for consideration by the Examiner.

I. LIST OF PATENTS, PUBLICATIONS, AND OTHER INFORMATION

The patents, publications and other information submitted for consideration by the Office (except unpublished U.S. patent applications) are listed on Form PTO-1449 attached hereto.

II. COPIES

A. Submitted herewith is a legible copy of (i) each foreign patent; (ii) each publication or that portion which caused it to be listed, other than U.S. patents and U.S. patent application publications unless required by the Office; (iii) for each cited pending unpublished U.S. application listed below in Section IV, the application specification including the claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion; and (iv) all other information or that portion which caused it to be listed.

B. Any patents, publications or other information which are listed on Form PTO-1449 or on the copies of Form PTO-892, but which are not enclosed herewith, were previously cited by or submitted to the PTO in one of the following applications which has been relied upon for an earlier filing date under 35 U.S.C. § 120:

U.S. Serial Number

U.S. Filing Date

	of the U.S. patents or U attached Form PTO-14-	I.S. patent application publicated are enclosed pursuant to being patent documents or non-	d after June 30, 2003, no copies ations which are listed on the to the waiver of 37 C.F.R. a-patent literature listed on the
	A copy of the Internation The documents listed on the PTO-1449 for considerate from this application. Single JPO search authorities, considerates and the search authorities, considerates are search authorities.	al Search Report is attached for the International Search Report tion by the Examiner and for the International Search Re- topies of these references sho teral agreement and are belief	onal Phase in the United States. For the Examiner's information. The are listed on the attached Form listing on any patent resulting eport was from the US, EPO, or would have been supplied to the eved to be in the file of the
III.	CONCISE EXPLANATION	ON OF THE RELEVANCE (check at least one box)
		ndicated below in (B), all of the glish language (concise explan	ne patents, publications or other nation not required).
			ch patent, publication or other is as follows (see 37 C.F.R.
	foreign app 2. English abst 525921.	plication:	Patent Publication No. JP 2001-758 corresponds to JP 2001-
	C. The following consideration.	additional information is p	provided for the Examiner's
IV.	CROSS REFERENCE TO	O RELATED APPLICATION	<u>I(S)</u>
	subject matter that may b	be related to the present application, Application,	ending application(s) contain(s) cation. By bringing this(these) nt(s) does(do) not waive the
	Serial No.	Filing Date	Art Unit

V. THIS IDS IS BEING FILED UNDER

A. 🔀	37 C.F.R. § 1.97(b): (check <u>only</u> one box)
	1. within three months of the filing date of a national application other than a continued prosecution application under 37 C.F.R. § 1.53(d) (37 C.F.R. § 1.97(b)(1)). No fee or certification is required.
	2. within three months of the date of entry of the national stage as set forth in 37 C.F.R. §1.491 in an international application (37 C.F.R. § 1.97(b)(2)). No fee or certification is required.
	3. before the mailing of a first Office Action on the merits (37 C.F.R. § 1.97(b)(3)). No fee or certification is required. In the event that a first Office Action on the merits has been issued, please consider this IDS under 37 C.F.R. § 1.97(c) and see the certification under 37 C.F.R. § 1.97(e) below; or, if no certification has been made, charge our deposit account a fee in the amount of \$180.00 as required by 37 C.F.R. § 1.17(p).
	4. before the mailing of a first Office Action after the filing of a request for continued examination under 37 C.F.R. § 1.114. No fee or certification is required.
В. 🗌 3	37 C.F.R. § 1.97(c): (check <u>only</u> one box)
	before the mailing date of either any Final Office Action under 37 C.F.R. § 1.113, a Notice of Allowance under 37 C.F.R. § 1.311, or an action that otherwise closes prosecution.
	1. No certification; therefore, a fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).
	2. See the certification below. No fee is required.
C. 🗀	37 C.F.R. § 1.97(d):
	after the mailing date of either a Final Office Action under 37 C.F.R. § 1.113 or a Notice of Allowance under 37 C.F.R. § 1.311, yet on or before payment of the issue fee.
	1. See the certification below. A fee in the amount of \$180.00 is required by 37 C.F.R. § 1.17(p).

VI.	CERTIFICATION UNDER 37 C.F.R. § 1.97(e): (check only one box)
	The undersigned hereby certifies that:
	A. each item of information contained in this IDS was first cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(1)). See further statement under 37 C.F.R. § 1.704(d) below in section VII, if applicable; or
	B. no item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS (See 37 C.F.R. § 1.97(e)(2)).
	C. Some of the items of information were first cited in a communication from a foreign patent office. As to this information, the undersigned hereby certifies that each item of information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this IDS. As to the remaining information, the undersigned hereby certifies that no item of this remaining information contained in this IDS was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, no item of information contained in this IDS was known to any individual designated in 37 C.F.R. § 1.56(c) more than three months prior to the filing of this IDS.
VII.	STATEMENT UNDER 37 C.F.R. § 1.704(d)
	The undersigned hereby states that:
	each item of information contained in this IDS was cited in a communication from a n patent office in a counterpart application and this communication was not received by dividual designated in 37 C.F.R. § 1.56(c) more than thirty days prior to the filing of this
VIII.	PAYMENT OF FEES (check only one box)
	A. No fee is believed to be due in light of the above-noted status or above-provided certification.
	B. A check in the amount of \$180.00 is enclosed for the above-identified fee.
	C. Please charge Deposit Account No. 08-0750 in the amount of \$180.00 for the above-indicated fee. A duplicate copy of this paper is attached.

The above references are being cited only in the interest of candor and without any admission that they constitute statutory prior art, contain matter which anticipates the invention, or which would render the same obvious, either singly or in combination, to a person of ordinary skill in the art. Furthermore, this Information Disclosure Statement shall not be construed as a representation that a search has been made.

If it is determined that this IDS has been filed under the wrong rule, the PTO is requested to consider this IDS under the proper rule (with a petition if necessary) and charge the appropriate fee to Deposit Account No. 08-0750.

Please charge any additional fees or credit any overpayment pursuant to 37 C.F.R. §§ 1.16 or 1.17 to Deposit Account No. 08-0750.

Respectfully submitted,

HARNESS, DICKEY, & PIERCE, P.L.C.

By ______ Donald J. Daley, Reg. No. 34,313

P.O. Box 8910 Reston, Virginia 20195 (703) 668-8000

DJD/GPB:ame

Enclosures:	\boxtimes	Form PTO-1449(s) (1 sheet(s))
	\boxtimes	Documents
		Foreign Search Report
		Fee
		Other:

PTO/SB/08A (07-06) Approved for use through 09/30/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

on Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449A/PTO				Complete if Known	
			Application Number	10/539,437	
INFORM	MATION D	ISCLOSURE	Filing Date	March 20,200h	
STATEMENT BY APPLICANT		First Named Inventor	Dr. Walter Gumbrecht		
			Art Unit	1635	
(use	as many sheets	as necessary)	Examiner Name	Unassigned	
Sheet		of	Attorney Docket Number	32860-000900/05	

			U.S. PATENT I	DOCUMENTS	
Evaminar	Examiner Initials * Cite No.1 Document Number Publication Date MM-DD-YYYY	Document Number		Name of Patentee or Applicant of	Pages, Columns, Lines, Where Relevant
		Cited Document	Passages or Relevant Figures Appear		
	1	US-5 736 257	07.04.98	US Navy (US)	
		US-			
	1	US-			
	1	US-			
		US-			

		Foreign Patent Document		Name of Patentee or	Pages, Columns, Lines,	T
Examiner Initials*	Cite No. ¹	Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)	Publication Date MM-DD-YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	T ⁶
	2	JP 2001-525921 (WO 98/01758)	11.12.01 (15.01.98)	Nanogen Inc.		Abst.
	3	WO 98/1758	15.01.98	Narogen Inc.		
••						
						-
						+

Examiner Signature	•	Date Considered	

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 1 Applicant's unique citation designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. 6 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

Approved for use through 09/30/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number

Substitute for form 1449A/PTO				Complete if Known	
	INFOR	MATION DISCLOSURE	Application Number	10/539,437	
		MATION DISCLOSURE	Filing Date	March 20,2006	
	SIAIE	MENT BY APPLICANT	First Named Inventor	Dr. Walter Gumbrecht	2,437 Ch 20,2006 alter Gumbrecht Ssigned
			Art Unit	1635	
	(use a	as many sheets as necessary)	Examiner Name	Unassigned	-
	Sheet	of	Attorney Docket Number	21/00/2007-00/05	

OTHER PRIOR ART NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T 2
	4	Fuchs et al: "A silicon lab-on-chip for integrated sample preparation by PCR and DNA analysis by hybridization", Annual International IEEE-EMBS Special Topic Conference on Microtechnologies in Medicine and Biology. Proceedings, 2.05.02, S. 227-231	
		·	
			·

Examiner	Date
Signature	Considered

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

¹ Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTQ to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTQ. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.